derivative has part or all of the amino acid sequence of Fig. 10.

5. (Amended) A cancer vaccine according to [any preceding] claim 1 wherein the [antigen,] polypeptide, fragment or derivative includes part or all of the amino acid sequence consisting of amino acids 97-159 of Fig. 10.

Sub A' cont

6. (Amended) A cancer vaccine according to claim 5 wherein the [antigen,] polypeptide, fragment or derivative includes a sequence having at least five amino acids identical with corresponding amino acids of a contiguous stretch of seven amino acids contained within amino acids 121-128 or 151-158 of Fig.10.

7 (Amended) A cancer vaccine according to [any preceding] claim 1 wherein the [antigen,] polypeptide, fragment or derivative includes a sequence having at least six amino acids identical with corresponding amino acids of a contiguous stretch of nine amino acids contained within amino acids 83-93 of Fig. 10.

8. (Amended) A cancer vaccine according to [any preceding] claim 1 comprising a fragment of at least five contiguous amino acids from a polypeptide of the CD55 family.

10. (Amended) A cancer vaccine according to [claim 8 or] claim 9 wherein the fragment is of at least seven contiguous amino acids.

13. (Amended) A cancer vaccine comprising a nucleic acid molecule which encodes [an antigen,] a polypeptide, fragment or derivative as specified in [any preceding] claim 1 wherein the vaccine is capable of inducing an immune response in a patient.

15. (Amended) A cancer vaccine according to [any preceding] claim 13 wherein the immune response is one or more of a T-helper cell response, a cytotoxic T-cell response and a NK cell response.

16. (Amended) A cancer vaccine according to [any preceding] claim 1 which is capable of inducing an immune response against CD55 or 791gp72 as expressed by cancer cells.

19. (Amended) A method of treating a patient having cancer, the method comprising administering to the patient a therapeutically effective amount of a cancer vaccine as defined in [any one of claims 1 to 17] claim 1.

22. (Amended) Isolated and purified 791Tgp72 antigen according to claim 20 [or claim 21] wherein the specificity of antibody binding to the said antigen, relative to antibody binding to the CD55 antigen as expressed on at least one of

human red blood cells [and/] or HUVEC cells, is greater for 791T/36 than for anti-CD55 antibody BRIC 216.

23. (Amended) Isolated and purified 791Tgp72 antigen according to [any one of claims 20 to 22] claim 20, as obtainable by:

(a) solubilising 791T cells in lysis buffer including 1% octyl-B-glucoside, pH 8.5 for 1 hour at 4°C;

(b) centrifuging the lysate at 13000 rpm x 10 min following 100,000 g x 30 min;

(c) adding the cleared lysate to Protein A sepharose coupled to 791T/36 affinity column;

(d) cycling the supernatant over the column at 0.3-0.4 ml/min;

(e) washing the column with 20ml 20 mM TrisHCl pH 8.0 containing 0.3 M NaCl and 0.1% NP-40; and

(f) eluting 791Tgp72 from the column in 5 column volumes of diethylamine pH 11.5 containing 0.5% NP-40 and neutralising the eluate with 1M Tris.

24. (Amended) A pharmaceutical composition comprising 791Tgp72 according to [any one of claims 20 to 23] claim 20 in combination with a pharmaceutically acceptable carrier.

---

26. (Amended) A method for isolating 791Tgp72 antigen from cells expressing 791Tgp72, the method including the steps of:

solubilising the cells with lysis buffer including octyl-glucoside; and

treating the lysate using ultracentrifugation to isolate said 791Tgp72 antigen.

Please cancel claims 18 and 25.

Please add the following new claims 27-32:

27. A cancer vaccine according to claim 2, wherein the antigen has part or all of the amino acid sequence of Fig. 10.

28. A cancer vaccine according to claim 2, wherein the antigen has part or all of the amino acid sequence consisting of amino acids 97-159 of Fig. 10.

29. A cancer vaccine according to claim 5, wherein the antigen includes a sequence having at least five amino acids identical with corresponding amino acids of a contiguous stretch of seven amino acids contained within amino acids 121-128 or 151-158 of Fig.10.

30. A cancer vaccine according to claim 2, wherein the antigen includes a sequence having at least six amino acids identical with corresponding amino acids of a contiguous stretch of nine amino acids contained within amino acids 83-93 of Fig. 10.

31. A cancer vaccine comprising a nucleic acid molecule which encodes an antigen as specified in claim 2, wherein the

vaccine is capable of inducing an immune response in a patient.

32. A cancer vaccine according to claim 31, having part or all of a nucleic acid sequence as shown in Fig. 10 or Fig. 11.

Respectfully submitted,

Patrick J. Hagan

Patrick J. Hagan
Reg. No. 27,643
Attorney for Applicant

PJH:ksk